lower region, 2) a diameter less than said upper region but greater than said lower region, or 3) a diameter equal to said lower region, wherein said lower region has a sufficiently small bore to hold an air bubble in it with an aqueous solution above and below it.

53 (Amended). The method of claim 52 further comprising detecting a band of particles in the lower region by a detection technique, which could not have been detected if the band were in the upper region by the same detection technique.

Cancel non-elected claims 54 through 56 without prejudice or disclaimer.

Add new claims 57 through 61 as follows.

- 57. (New) The method of claim 52 wherein the sample is a biological sample.
- 58. (New) The method of claim 52 wherein the particles are microorganisms.
- 59. (New) The method of claim 52 wherein at least two different fluids are present, each in different regions.
- 60. (New) The method of claim 59 wherein said two different fluids are held separately with substantially no diffusion between each before centrifugation.
- 61. (New) The method of claim 52 wherein an air bubble separates the middle region from the lower region.